

Title (en)  
Improved control of pressure swing adsorption operations

Title (de)  
Verbesserte Steuerung der Durchführung der Druckwechseladsorption

Title (fr)  
Contrôle amélioré des opérations d'adsorption de pression alternée

Publication  
**EP 0458350 B1 19960131 (EN)**

Application  
**EP 91108443 A 19910524**

Priority  
US 52880690 A 19900525

Abstract (en)  
[origin: EP0458350A1] A pressure swing adsorption process and system for air separation includes a variable volume nitrogen product storage vessel, which is monitored to determine variations in user product demand. The processing cycle and individual processing steps are adjusted during periods of reduced demand to maintain a desired product purity and pressure, with power reduction and energy savings being achieved under turndown conditions. <IMAGE>

IPC 1-7  
**C01B 21/04**; **B01D 53/04**; **C01B 13/02**

IPC 8 full level  
**B01D 53/04** (2006.01); **B01D 53/047** (2006.01); **F17C 11/00** (2006.01)

CPC (source: EP KR US)  
**B01D 53/02** (2013.01 - KR); **B01D 53/047** (2013.01 - EP US); **B01D 53/053** (2013.01 - EP US); **B01D 2256/10** (2013.01 - EP US); **B01D 2256/12** (2013.01 - EP US); **B01D 2257/102** (2013.01 - EP US); **B01D 2259/40015** (2013.01 - EP US); **B01D 2259/40022** (2013.01 - EP US); **B01D 2259/4003** (2013.01 - EP US); **B01D 2259/40052** (2013.01 - EP US); **B01D 2259/40073** (2013.01 - EP US); **B01D 2259/402** (2013.01 - EP US)

Cited by  
EP0567852A3; EP0819463A3; FR3078491A1; FR2841152A1; EP0678322A1; FR2718979A1; US5505764A; EP0923977A1; FR2772637A1; US6090185A; US7255727B2; US11819796B2; WO2004000441A1; WO2019166725A1

Designated contracting state (EPC)  
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**EP 91108443 A 19910524**; AT 91108443 T 19910524; BR 9102098 A 19910521; CA 2043183 A 19910524; CN 91103770 A 19910524; DE 69116730 T 19910524; ES 91108443 T 19910524; JP 14809391 A 19910524; KR 910008410 A 19910524; TW 80104536 A 19910611; US 52880690 A 19900525